

may be similar to example computer system **200**. Particular embodiments may implement various functions of management system **102** as hardware, software, or a combination of hardware and software. As an example and not by way of limitation, one or more computer systems may execute particular logic or software to perform one or more steps of one or more processes described or illustrated with respect to management system **102**. One or more of the computer systems may be unitary or distributed, spanning multiple computer systems or multiple datacenters, where appropriate. The present disclosure contemplates any suitable computer system. Herein, reference to logic may encompass software, and vice versa, where appropriate. Reference to software may encompass one or more computer programs, and vice versa, where appropriate. Reference to software may encompass data, instructions, or both, and vice versa, where appropriate. Similarly, reference to data may encompass instructions, and vice versa, where appropriate.

**[0017]** One or more tangible computer-readable media may store or otherwise embody software implementing particular embodiments. A tangible computer-readable medium may be any medium capable of carrying, communicating, containing, holding, maintaining, propagating, retaining, storing, transmitting, transporting, or otherwise embodying software, where appropriate. A tangible computer-readable medium may be a biological, chemical, electronic, electromagnetic, infrared, magnetic, optical, quantum, or other suitable medium or a combination of two or more such media, where appropriate. A tangible computer-readable medium may include one or more nanometer-scale components or otherwise embody nanometer-scale design or fabrication. Example tangible computer-readable media include, but are not limited to, application-specific integrated circuits (ASICs), compact discs (CDs), field-programmable gate arrays (FPGAs), floppy disks, optical disks, hard disks, holographic storage devices, magnetic tape, caches, programmable logic devices (PLDs), random-access memory (RAM) devices, read-only memory (ROM) devices, semiconductor memory devices, and other suitable computer-readable media.

**[0018]** Software implementing particular embodiments may be written in any suitable programming language (which may be procedural or object oriented) or combination of programming languages, where appropriate. Any suitable type of computer system (such as a single- or multiple-processor computer system) or systems may execute software implementing particular embodiments, where appropriate. A general-purpose computer system may execute software implementing particular embodiments, where appropriate.

**[0019]** The components in FIG. **2** are examples only and do not limit the scope of use or functionality of any hardware, software, embedded logic component, or a combination of two or more such components implementing particular embodiments. Computer system **200** may have any suitable physical form, including but not limited to one or more integrated circuits (ICs), printed circuit boards (PCBs), mobile handheld devices (such as mobile telephones or PDAs), laptop or notebook computers, distributed computer systems, computing grids, or servers. Computer system **200** includes a display **232**, one or more input devices **233** (which may, for example, include a keypad, a keyboard, a mouse, a stylus, etc.), one or more output devices **234** (which may, for example, include one or more speakers), one or more storage devices **235**, and various tangible storage media **236**.

**[0020]** Bus **240** connects a wide variety of subsystems. Herein, reference to a bus encompasses one or more digital signal lines serving a common function, where appropriate. Bus **240** may be any of several types of bus structures including a memory bus, a peripheral bus, or a local bus using any of a variety of bus architectures. As an example and not by way of limitation, such architectures include an Industry Standard Architecture (ISA) bus, an Enhanced ISA (EISA) bus, a Micro Channel Architecture (MCA) bus, a Video Electronics Standards Association local bus (VLB), a Peripheral Component Interconnect (PCI) bus, a PCI-Express (PCI-X) bus, and an Accelerated Graphics Port (AGP) bus.

**[0021]** Processor(s) **201** (or central processing unit(s) (CPU(s))) optionally contains a cache memory unit **202** for temporary local storage of instructions, data, or computer addresses. Processor(s) **201** are coupled to storage devices including memory **203**. Memory **203** may include random access memory (RAM) **204** and read-only memory (ROM) **205**. ROM **205** may act to communicate data and instructions unidirectionally to processor(s) **201**, and RAM **204** may act to communicate data and instructions bidirectionally with processor(s) **201**. ROM **205** and RAM **204** may include any suitable computer-readable media described below. Fixed storage **208** is connected bidirectionally to processor(s) **201**, optionally through storage control unit **207**. Fixed storage **208** provides additional data storage capacity and may also include any suitable computer-readable media described. Storage **208** may be used to store operating system **209**, EXECs **210**, data **211**, application programs **212**, and the like. Typically, storage **208** is a secondary storage medium (such as a hard disk) that is slower than primary storage. Information in storage **208** may, in appropriate cases, be incorporated as virtual memory in memory **203**.

**[0022]** Processor(s) **201** is connected to multiple interfaces, such as graphics control **221**, video interface **222**, input interface **223**, output interface **224**, and storage interface **225**. These interfaces are in turn connected to appropriate devices, as illustrated. In general, an input/output (I/O) device may be a video display, a track ball, a mouse, a keyboard, a microphone, a touch-sensitive display, a transducer card reader, a magnetic- or paper- tape reader, a tablet, a stylus, a voice or handwriting recognizer, a biometrics reader, another computer systems, or other suitable I/O device or a combination of two or more such I/O devices. Processor(s) **201** may connect to another computer system or to telecommunications network **230** (which may include network links **106** and **110**) through network interface **220**. With network interface **220**, CPU **201** may communicate with network **230** in the course of performing one or more steps of one or more processes described or illustrated herein, according to particular needs. Moreover, one or more steps of one or more processes described or illustrated herein may execute solely at CPU **201**. In addition or as an alternative, one or more steps of one or more processes described or illustrated herein may execute at multiple CPUs **201** that are remote from each other across network **230**.

**[0023]** In particular embodiments, when computer system **200** is connected to network **230**, computer system **200** may communicate with other devices, specifically remote computer system **104** and mobile device **108**, connected to network **230**. Communications to and from computer system **200** may be sent through network interface **220**. For example, network interface **220** may receive incoming communications (such as requests or responses from other devices) in the